

CLAIM

1. A motor, comprising;
a first rotor;
a second rotor capable of independent rotation with respect to said
first rotor; and
5 a common stator for differentially driving said first and second
rotors.
2. A motor according to claim 1 wherein said common stator
includes a single winding for activating said first and second rotors.
3. A motor according to claim 1 wherein said common stator
comprises first and second windings for driving said first and second rotors
respectively.
4. An electric drive system, comprising;
first means for configured to produce electrical energy;
at least first and second drive wheels; and
a motor, comprising;
5 a first rotor for driving said first drive wheel;
a second rotor for driving said second drive wheel, said first
and second rotors capable of independent relative rotation; and
a common stator coupled to a said generating means for driving
said first and second rotors.
5. An electric drive system according to claim 4 wherein said
common stator includes a single winding for energizing said first and second
rotors.

6. An electric drive system according to claim 4 wherein said common stator comprises first and second windings for driving said first and second rotors, respectively.

7. An electric drive system according to claim 4 wherein said first means is an inverter.

8. An electric drive system according to claim 4 further comprising a processor coupled to said inverter for altering the torque applied to one said first and second rotors relative to the other of said first and second rotors.

9. An electric drive system according to claim 8 further comprising second means for sensing the torque applied to each of said first and second drive wheels.

10. An electric drive system according to claim 8 further comprising second means for sensing the speed of each of said first and second drive wheels.

11. An electric drive system according to claim 9 wherein said second means comprises a closed loop torque controller.

12. An electric drive system according to claim 10 wherein said second means comprises a closed loop speed controller.

13. An electric drive system, comprising;
at least first and second drive wheels;
a motor comprising;
a first rotor for driving said first drive wheels;

- 5 a second rotor for driving said second drive wheels, said first
and second rotors capable of independent relative rotation; and
 a common stator coupled to said generating means and to said
common stator for driving said first and second rotors;
 a processor coupled to said motor; and
10 at least one sensor mechanism coupled to said processor for
providing at least a first operational parameter to said processor for altering
the operation of said motor to improve traction of at least one of said first and
second drive wheels.

14. An electric drive system according to claim 13 wherein said
first operational parameter is torque.

15. An electric drive system according to claim 13 wherein said
first operational parameter is speed.

16. An electric drive system according to claim 13 wherein said
common stator includes a single winding for energizing said first and second
rotors.

17. An electric drive system according to claim 13 wherein said
common stator comprises first and second windings for driving said first and
second rotors, respectively.

18. An electric drive system according to claim 14 wherein said at
least one sensor mechanism comprises a closed loop torque controller.

19. An electric drive system according to claim 15 wherein said at
least one sensor mechanism comprises a closed loop speed controller.